

Identified global consumers of tantalum concentrates

Explanation: This list contains global facilities known to be able to process tantalum concentrate to produce industrial tantalum products.

Country	Product(s) ¹	Location	Operator/owner
Austria	Ta ₂ O ₅ , TaC	Multiple; Althofen, Carinthia (HQ)	Treibacher Industrie AG
Austria	Ta ₂ O ₅ , TaPwdr, TaMtl	Multiple; Liezen, Reutte (HQ)	PLANSEE Group
Brazil	Ta ₂ O ₅	São João Del Rei, Minas Gerais State	LSM Brazil SA (formerly Companhia Industrial Fluminense)[AMG Advanced Metallurgical Group N.V. (Netherlands)] (formerly London & Scandinavian Metallurgical Co., Ltd.)
Brazil	FeNbTa	São Paulo State	Mineração Taboca SA (Minsur SA)
China	TaPwdr, Ta ₂ O ₅ , K ₂ TaF ₇ , TaMtl	Taiping Town, Shengang, Conghua, Guangdong Province	Conghua Tantalum and Niobium Smeltery (CTNS) (Guangdong Rising Nonferrous Metals Group Co., Ltd.)
China	TaPwdr, Ta ₂ O ₅ , K ₂ TaF ₇ , TaMtl	Zhaoqing, Guangdong Province	Duo Luo Shan Sapphire Rare Metal Co. Ltd of Zhaoqing
China	K ₂ TaF ₇ , Ta ₂ O ₅ , TaC	Chengnan Industrial Zone, Qingyuan, Guangdong Province	Fogang Jiata Metals Co., Ltd.
China	Ta ₂ O ₅ , K ₂ TaF ₇	Yingde, Guangdong Province	Guangdong Zhiyuan New Material Co., Ltd. (Jiayuan Cobalt Holdings)
China	Ta ₂ O ₅ , K ₂ TaF ₇	Sisan Rd. Songjiacun 1, Zhuhui District, Hengyang City, Hunan Province	Hengyang King Xing Lifeng New Materials Co., Ltd.
China	Ta ₂ O ₅ , K ₂ TaF ₇ , TaPwdr, TaMtl	Yaxi Industrial Development Zone, Xinhui, Jiangmen, Guangdong Province	Jiangmen Fuxiang Electro-materials Ltd. (F&X Electro-Materials Ltd.)
China	Ta ₂ O ₅ , K ₂ TaF ₇	Fengxin County, Jiangxi Province	Jiangxi Ding Hai Tantalum & Niobium Co., Ltd.
China	Ta ₂ O ₅ , K ₂ TaF ₇ , TaC, TaMtl	No. 226, Binjiang East Road, Jiujiang, Jiangxi Province	JiuJiang JinXin Nonferrous Metals Co., Ltd.
China	Ta ₂ O ₅ , TaC, TaMtl	Xin Gang Town (East City Development Zone), Jiujiang, Jiangxi Province	Jiujiang Tanbre Co., Ltd. (JJTC) (formerly Jiujiang Tanbre smelter) (Jiangxi Tungsten Group Ltd Corp. [JWYX])
China	Ta ₂ O ₅ , K ₂ TaF ₇ , TaC, TaMtl	Jiujiang, Jiangxi Province	Jiujiang Zhongao Tantalum & Niobium Co., Ltd. (joint venture Jiangxi Jiujiang Yizhong Nonferrous Metals Co., Ltd., and others)
China	Ta ₂ O ₅ , K ₂ TaF ₇ , TaC, TaPwdr, TaMtl	Shishi Industrial Zone, Yifeng County Industrial Park, Fengcheng, Jiangxi Province	King-Tan Tantalum Industry, Ltd.
China	TaAlloys, TaC, Ta ₂ O ₅ , TaN, TaSi ₂ , TaSe ₂	Many (Shanghai, Suzhou in China and others in England, Ireland, Philippines, Singapore, Taiwan, and United States)	Materion Advanced Materials Thin Film Products
China	Ta ₂ O ₅ , TaMtl, TaPwdr	Jiangning Economic Development Zone, Nanjing, Jiangsu Province	Metalink International Co., Ltd. (affiliates: Nanjing Metalink International Co., Ltd., and Metalink Special Alloys Corp.)
China	Ta ₂ O ₅ , TaCl ₅ , TaNbC, Ta ethoxide, TaMtl, TaAlloys, TaPwdr	Shizuishan, Ningxia Province	Ningxia Orient Tantalum Industry Co., Ltd. (OTIC)

China	Ta ₂ O ₅	Buxia Cun, Rencun Town, Xinxing, Yunfu, Guangdong Province	XinXing Haorong Electronic Material Co., Ltd.
China	Ta ₂ O ₅ , TaC, TaPwdr	Lianggang Industrial Park, Yifeng County, Yichun, Jiangxi Province	Yichun Jinyang Rare Metal Co., Ltd.
China	K ₂ TaF ₇ , Ta ₂ O ₅ , Ta ethoxide, TaPwdr, TaMtl, TaAlloys, TaC	Zhuzhou, Hunan Province	Zhuzhou Cemented Carbide Group Corporation, Ltd.
Estonia	Ta ₂ O ₅ , TaH ₅ , TaMtl (ingots, chips)	Sillamae, Ida-Virumaa	Molycorp Silmet AS (Molycorp, Inc.)
Germany	TaMtl, Ta ₂ O ₅ , TaAl	Freiberg, Saxony	Freiberger NE-Metall GmbH & Co. Produktions KG (GfE Gesellschaft für Elektrometallurgie mbH, AMG Advanced Metallurgical Group N.V.)
Germany	TaMtl, Ta ₂ O ₅ , TaAl	Nuremberg, Middle Franconia	GfE - Metalle und Materialien GmbH (GfE Gesellschaft für Elektrometallurgie mbH, AMG Advanced Metallurgical Group)
Germany	TaPwdr, TaNbC, Ta ₂ O ₅ , TaCl ₅ , TaMtl, TaRecyc	Many (Munich [HQ]; Im Schleeke, Goslar, Lower Saxony; Hermsdorf, Thuringia; two plants in Laufenberg, Baden-Wurttemberg in Germany; others in China, Japan, Thailand, and United States)	H.C. Starck Smelting GmbH & Co., KG (H.C. Starck, GmbH)
Germany	TaPwdr, TaNbC, Ta ₂ O ₅ , TaCl ₅ , TaMtl, TaRecyc	Hanau, Hesse	Heraeus Deutschland GmbH & Co. KG (formerly W.C. Heraeus) (Heraeus Holding, GmbH)
India	K ₂ TaF ₇ , Ta ₂ O ₅	Taloja, District Raigad, Maharashtra	Metallurgical Products India Pvt Ltd. (MPIL)
Japan	Ta ₂ O ₅ , TaC, TaNbC	Omuta, Fukuoka Prefecture	Engineered Powders Div. Miike Rare Metal Plant (Mitsui Mining and Smelting Co., Ltd.)
Japan	TaPwdr	Aizuwakamatsu, Fukushima Prefecture	Global Advanced Metals, Pty, Ltd.
Japan	Ta ₂ O ₅	Kako, Hyogo Prefecture	Taki Chemicals Co., Ltd.
Kazakhstan	TaAlloy, TaMtl, TaPwdr	Ust-Kamenogorsk, East Kazakhstan	Ulba Metallurgical Plant JSC
Mexico	K ₂ TaF ₇	Matamoros, Tamaulipas	Kemet De Mexico, S.A. de C.V. (Kemet Blue Metals, [Kemet Corp.]
Russia	Ta ₂ O ₅ , TaMtl	Solikamsk, Perm Krai	OAO Solikamsk Magnesium Works (SMZ)
United States	TaMtl, TaAlloys	Boyertown, Montgomery County, PA	Global Advanced Metals
United States	TaPwdr	Mound House, NV	Kemet Blue Powder (Kemet Corp.)
United States	TaAlloys, TaC, Ta ₂ O ₅ , TaN, TaSi ₂ , TaSe ₂	Many (Shanghai, Suzhou in China and others in England, Ireland, Philippines, Singapore, Taiwan, and United States)	Materion Advanced Materials Thin Film Products (headquarteres in Cleveland, OH)

HQ Headquarters

¹ K_2TaF_7 , K-salt (potassium fluorotantalate); Ta, tantalum; Ta_2O_5 , tantalum pentoxide; TaAl, tantalum-aluminum alloy; TaAlloys, tantalum alloys; TaC, tantalum carbide; $TaCl_5$, tantalum chloride; TaH_5 , tantalum hydride; TaMtl, tantalum metal; TaN, tantalum nitride; TaNbC, tantalum niobium carbide; TaPwdr, tantalum powder; TaRecyc, tantalum recycle; $TaSe_2$, tantalum diselenide; $TaSi_2$, tantalum silicide.

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Identified global consumers of tin concentrates (refineries and smelters).

Explanation: Additional small-scale smelters may be in operation in Indonesia, but their status could not be confirmed. Facilities were thought to be active unless otherwise noted.

Country	Location	Operator/owner	Facility type and status (if applicable)
Australia	Greenbushes, Western Australia	Global Advanced Metals Pty Ltd.	Smelter (on care and maintenance since 2012)
Belgium	Beerse	Metallo-Chimique nV	Smelter
Bolivia	Oruro, Oruro Department	Operaciones Metalúrgicas S.A. (OMSA)	Smelter
Bolivia	Vinto, Oruro Department	Empresa Metalúrgica Vinto S.A.	Smelter
Brazil	Coopersanta, Bom Futuro, Ariquemes, Rondônia	Coopersanta	Smelter
Brazil	White Solder, Rondônia	White Solder Metalurgia e Mineração	Refinery
Brazil	Pinpora, Sao Paulo	Mineração Taboca S.A.	Smelter
Brazil	Ariquemes, Rondônia	Estanho de Rondônia S.A.	Smelter
China	Chenzhou, Hunan Province	Chenzhou Smelter	Smelter
China	Gejiu, Yunnan Province	Yunnan Chengfeng Nonferrous Metals Co. Ltd.	Smelter
China	Gejiu, Yunnan Province	Yunnan Tin Co. Ltd.	Smelter
China	Hezhou, Guangxi Province	Guihuacheng Smelter	Smelter
China	Huogudu, Yunnan Province	Yunnan Gejiu Zili Metallurgy Co. Ltd.	Smelter
China	Laibin, Guangxi Province	Guangxi China Tin Group Co. Ltd.	Smelter
China	Nankang, Jiangxi Province	Nanshan Tin Co. Ltd.	Smelter

Congo, Democratic Republic of the	Lubumbashi	Malaysia Smelting Corp. Bhd.	Smelter (to be operational with the Bisie project)
India	Jagdapur, Dantewada Distirct, Chhattisgarh State	Precious Minerals and Smelting Ltd.	Smelter
India	Raipur, Dantewada District, Chhattisgarh State	Chhattisgarh Mineral Development Co. Ltd.	Smelter
Indonesia	Bangka Belitung Province	CV Duta Putra Bangka	Smelter
Indonesia	Bangka Belitung Province	CV Justindo	Smelter
Indonesia	Jalan Rungkut, East Java Province	CV Makmur Jaya	Smelter
Indonesia	Bangka Belitung Province	CV Nurjanah	Smelter
Indonesia	Bangka Belitung Province	CV Prima Timah Utama	Smelter
Indonesia	Bangka Belitung Province	CV Serumpun Sebalai	Smelter
Indonesia	Pangkalpinang, Bangka Belitung Province	CV United Smelting	Smelter
Indonesia	Bangka Belitung Province	PT Artha Cipta Langgeng	Smelter
Indonesia	Bangka Belitung Province	PT Babel Inti Perkasa	Smelter
Indonesia	Bangka Belitung Province	PT Babel Surya Alam Lestari	Smelter
Indonesia	Bangka Belitung Province	PT Bangka Global Mandiri Internasional	Smelter
Indonesia	Bangka Belitung Province	PT Bangka Kudai Tin	Smelter
Indonesia	Bangka Belitung Province	PT Bangka Putra Karya	Smelter
Indonesia	Bangka Belitung Province	PT Bangka Timah Utama Sejahtera	Smelter
Indonesia	Bangka Belitung Province	PT Belitung Industri Sejahtera	Smelter
Indonesia	Bangka Belitung Province	PT Billitin Makmur Lestari	Smelter
Indonesia	Bangka Belitung Province	PT Bukit Timah Tbk	Smelter

Indonesia	Bangka Belitung Province	PT Donna Kembara Jaya	Smelter
Indonesia	Bangka Belitung Province	PT DS Jaya Abadi	Smelter
Indonesia	Bangka Belitung Province	PT Eunindo Usaha Mandiri	Smelter
Indonesia	Bangka Belitung Province	PT Fang Di Multindo	Smelter
Indonesia	Koba, Bangka Island, Bangka Belitung Province	PT Koba Tin	Smelter
Indonesia	Bangka Belitung Province	PT Mitra Stania Prima	Smelter
Indonesia	Bangka Belitung Province	PT Refined Bangka Tin	Smelter
Indonesia	Bangka Belitung Province	PT Stanindo Inti Perkasa	Smelter
Indonesia	Mentok, Bangka Island, South Sumatra	PT Tambang Timah Tbk	Smelter
Indonesia	Kundur Island, Bangka Belitung Province	PT Timah Tbk	Smelter
Indonesia	Bangka Belitung Province	PT Tinindo Inter Nusa	Smelter
Indonesia	Bangka Belitung Province	PT Yinchendo Mining Industry	Smelter
Malaysia	Butterworth, Penang	Malaysia Smelting Corp. Bhd.	Smelter
Peru	Pisco, Ica Department	Minsur S.A.	Refinery and smelter
Rwanda	Gisenyi	Metal Processing Association	Smelter (not operational in 2013)
Rwanda	Karuruma	Phoenix Metals Ltd.	Smelter (resumed operations in 2015)
Thailand	Phuket, Phuket Province	Thailand Smelting and Refining Co. Ltd. (Thaisarco)	Refinery and smelter
Vietnam	Thai Nguyen City, Thai Nguyen Province	Thai Nguyen Nonferrous Metal Co.	Refinery

Identified global consumers of tungsten concentrates

Explanation: This list represents global plants that are known to process tungsten concentrates. It does not include plants that only process scrap or only process materials downstream from concentrates and/or scrap. Additional concentrate-consuming plants may exist that were not included if the type of feed materials processed could not be confirmed.

COUNTRY	PRODUCTS	LOCATION	OPERATOR AND OWNERSHIP
Austria	Ammonium paratungstate	Bergla, St. Martin im Sulmtal, Styria	Wolfram Bergbau und Hütten AG (Sandvik AB, 100%)
Brazil	Ferrotungsten	Araçariçuama, São Paulo	ACL Metais Ltda
Brazil	Ferrotungsten	Bom Jesus dos Perdões, São Paulo	Boreste Ligas Ltda
Brazil	Ferrotungsten	São Bernardo do Campo, São Paulo	Giro Metais Industria e Comercio Ltda
China	Ammonium paratungstate	Chengguan Town, Chaling County, Zhuzhou, Hunan Province	Chaling Dadi Tungsten Co., Ltd.
China	Ammonium paratungstate	Chenzhou, Hunan Province	Chenzhou Diamond Tungsten Products Co., Ltd.
China	Ammonium paratungstate	Luanchuan County, Luoyang City, Henan Province	China Molybdenum Co., Ltd. (also known as Luoyang Luanchuan Molybdenum Co., Ltd.)
China	Ammonium paratungstate	Chongyi County, Ganzhou, Jiangxi Province	Chongyi Zhangyuan Tungsten Co., Ltd.
China	Ammonium paratungstate	Xincheng Industrial Park, Dayu County, Ganzhou, Jiangxi Province	Dayu Jincheng Tungsten Industry Co., Ltd.
China	Ammonium paratungstate	Dayu Smelting Plant, Nan'an Town, Dayu County, Ganzhou, Jiangxi Province	Dayu Weiliang Tungsten Co., Ltd.
China	Ammonium paratungstate	Dongtai City, Jiangsu Province	Dongtai Huihuang Tungsten & Molybdenum Product Co., Ltd.
China	Ammonium paratungstate	Longyan Industry Region, Xinluo District, Longyan City, Fujian Province	Fujian Jinxin Tungsten Co., Ltd.
China	Ammonium paratungstate	Fuzhou City, Fujian Province	Fujian Minmetals Jinjiang Nonferrous Metals Co., Ltd.
China	Ammonium paratungstate	Jinjiang, Fujian Province	Fujian Ninghua Jinjiang Tungsten Co. Ltd.
China	Ammonium paratungstate	Xiushui County, Jiangxi Province	Ganbei Tungsten Industry Co., Ltd. [Jiangxi Gan Bei Tungsten Co., Ltd. (China Minmetals Non-ferrous Metals Holding Co., Ltd.)]
China	Ammonium paratungstate	Gan County, Ganzhou City, Jiangxi Province	Ganxian Shirui New Material Co., Ltd.
China	Ammonium paratungstate	Xincheng, Jiangxi Province	Ganzhou Haichuang Tungsten Industry Co., Ltd. [Ganzhou Tejing Tungsten & Molybdenum Co., Ltd. (GZTJ)]
China	Ammonium paratungstate	Ganzhou, Jiangxi Province	Ganzhou Huaxing Tungsten Products Co. Ltd. [Jiangxi Tungsten Industry Group Co. Ltd. (JWYX) [joint venture between China Minmetals and Jiangxi Rare Earth and Rare Metals Tungsten Group Corp. (JXTC)]]
China	Ammonium paratungstate	Ganzhou, Jiangxi Province	Ganzhou Seadragon W & Mo Co., Ltd. (Ganzhou Grand Sea W & Mo Group Co., Ltd.)
China	Ammonium paratungstate	Huichang County, Junmenling Town, Ganzhou City, Jiangxi Province	Ganzhou Yatai Tungsten Co., Ltd.
China	Ammonium paratungstate	Guantang Industrial Zone, Chao'an County, Chaozhou, Guangdong Province	GuangDong XiangLu Tungsten Co., Ltd. (Chaozhou Xianglu Tungsten Industry Co., Ltd.)
China	Ammonium paratungstate	Ganzhou, Jiangxi Province	H.C. Starck Jiangwu Tungsten Specialties (Ganzhou) Co., Ltd. [H.C. Starck GmbH and Jiangxi Rare Metals Tungsten Holdings Group Co. Ltd. (JXTC)]

China	Ammonium paratungstate	Shanhu Town, Zhongshan County, Hezhou City, Guangxi Province	Hezhou Pinggui PGMA Shanhu Wolfram Products Co. Ltd. [CNMC (Guangxi) PGMA Co. Ltd. (China Nonferrous Metal Mining (Group) Co., Ltd.)]
China	Ammonium paratungstate	Xintang Town, Hengdong County, Hengyang, Hunan Province	Hunan Chun Chang Nonferrous Metals Corp.
China	Ammonium paratungstate	Chenzhou Mining Tungsten Products Plant, Hunan Province	Hunan Gold Corp. Ltd.
China	Ammonium paratungstate	Huanglong Industrial Park, Huanglong Town, Dayu County, Ganzhou City, Jiangxi Province	Jiangxi Dayu Longxintai Tungsten Co., Ltd.
China	Ammonium paratungstate	New Century Industrial Park, Tong Cheng Dong Da 1, Gao'an City, Jiangxi Province	Jiangxi Minmetals Gao'an Non-ferrous Metals Co., Ltd.
China	Ammonium paratungstate	Tonggu, Yichun, Jiangxi Province	Jiangxi Tonggu Non-ferrous Metallurgical & Chemical Co., Ltd. [Jiangxi Rare Metals Tungsten Holding Group Co., Ltd. (JXTC)]
China	Ammonium paratungstate	Dingnan County, Ganzhou, Jiangxi Province	Jiangxi Xinsheng Tungsten Industry Co., Ltd. [Jiangxi Rare Metals Tungsten Holding Group Co., Ltd. (JXTC)]
China	Ammonium paratungstate	Xiushui Industrial Park, Xiushui, Jiangxi Province	Jiangxi Xiushui Xianggan Nonferrous Metals Co., Ltd.
China	Ammonium paratungstate	Changlong Town, Chongyi County, Ganzhou, Jiangxi Province	Jiangxi Yaosheng Tungsten Co., Ltd.
China	Ammonium paratungstate	Langfang Tungsten & Molybdenum Material Plant, Langfang, Hebei Province	Langfang (Torch) Huaying Tungsten & Molybdenum Industry Co., Ltd.
China	Ammonium paratungstate	Qiancun, Heyu Town, Luanchuan County, Luoyang, Henan Province	Luoyang Mudu Tungsten & Molybdenum Technology Co., Ltd.
China	Ammonium paratungstate	Xiagou Industry Region, Xigong District, Luoyang, Henan Province	Luoyang Yongzhuo Tungsten & Molybdenum Material Co., Ltd.
China	Ammonium paratungstate	Nanfeng Xiaozhai, Yunnan Province	Malipo Haiyu Tungsten Co., Ltd. [Xiamen Tungsten Co., Ltd. (XTC)]
China	Ammonium paratungstate	Ninghua County, Sanming City, Fujian Province	Ninghua Fuyan Mineral Products Co., Ltd.
China	Ammonium paratungstate	Hengyang City, Hunan Province	South-East Nonferrous Metal Company Ltd. of Hengyang City (China National NonFerrous Metals Imp. & Exp. Jiangxi Corp. Ltd.)
China	Ammonium paratungstate	Dapu Industrial Park, Hengdong County, Hunan Province	Tungsten-cobalt Co. [Hunan Chuangda Vanadium Tungsten Co., Ltd. (HCVT)]
China	Ammonium paratungstate	Wendeng District, Weihai, Shandong Province	Wendeng Zhengxing Tungsten Industry Co., Ltd.
China	Ammonium paratungstate	Fujian Xiamen Tungsten Products Plant, Haicang District, Xiamen, Fujian Province	Xiamen Tungsten Co., Ltd. (XTC)
China	Ammonium paratungstate	Xiamen, Fujian Province	Xiamen Tungsten (H.C.) Co., Ltd. [Xiamen Tungsten Co., Ltd. (XTC)]
China	Ammonium paratungstate	Xinfeng County, Ganzhou City, Jiangxi Province	Xinfeng Huarui Tungsten & Molybdenum New Material Co., Ltd.
China	Ammonium paratungstate	Guihua Village, Renhua County, Shaoguan, Guangdong Province	Xinhai Rendan Shaoguan Tungsten Co., Ltd.
China	Ammonium paratungstate	Sanxing Industrial Park, Rucheng County, Chenzhou City, Hunan Province	Zhongxiang Tungsten Co., Ltd.
China	Ammonium paratungstate	Zigong, Sichuan Province	Zigong Cemented Carbide Co., Ltd. (China Minmetals Corp.)
China	Ferrotungsten	Jiuli township, Emeishan City, Sichuan Province	Chuantou Emei Ferroalloy [Sichuan Chuantou Emei Ferroalloy (Group) Co., Ltd.]
China	Ferrotungsten	Hengdong County, Wu Town, Hengyang, Hunan Province	Ferro-tungsten Co. [Hunan Chuangda Vanadium Tungsten Co., Ltd. (HCVT)]

China	Ferrotungsten	Meilin Town, Gan County, Ganzhou, Jiangxi Province	Ganzhou BESEEM Ferrotungsten Co. Ltd.
China	Ferrotungsten	Meilin Town, Gan County, Ganzhou City, Jiangxi Province	Ganzhou Jiangwu Ferrotungsten Co. Ltd. [Jiangxi Tungsten Industry Group Co. Ltd. (JWYX) [joint venture between China Minmetals and Jiangxi Rare Earth and Rare Metals Tungsten Group Corp. (JXTC)]]
China	Ferrotungsten	Anhua County, Hunan Province	Hunan Litian Century Mining Co., Ltd.
China	Ferrotungsten	Xinxiangxilu, Xiangxiang City, Xiangtan municipality, Hunan Province	Minmetals (Hunan) Ferroalloys Co. Ltd. (China Minmetals Corp.)
China	Ferrotungsten	Jilin, Jilin Province	Sinosteel Jilin Ferroalloy Corporation Ltd. (Sinosteel Corp.)
Germany	Ammonium paratungstate	Goslar, Lower Saxony	H.C. Starck GmbH
India	Ammonium paratungstate	Sinnar, Nasik, Maharashtra State	SRP Tungsten Pvt. Ltd. (SRP Electronica Group)
Japan	Ammonium paratungstate	Akita, Akita Prefecture	Japan New Metals Co. Ltd. (Mitsubishi Materials Corp. and Ryoko Sangyo Corp.)
Russia	Ammonium paratungstate	Nalchik, Kabardino-Balkariya Republic	JSC Hydrometallurg (Wolfram Company CJSC)
Russia	Ammonium paratungstate	Kirovgrad Hard Alloys Plant, Kirovgrad, Sverdlovskaya Oblast	JSC Kirovgrad Hard Alloys (JSC KZTS)
Russia	Ammonium paratungstate	Vladikavkaz, North Ossetia Republic	JSC Pobedit (Wolfram Company CJSC)
Russia	Ferrotungsten plant	Unecha, Bryansk Oblast	Wolfram CJSC
South Korea	Ferrotungsten plant	Gyeongju, Gyeongbuk Province	Woltech Korea Co., Ltd.
United States	Ammonium paratungstate	Towanda, Pennsylvania	Global Tungsten & Powders Corp. (Plansee Group)
United States	Ammonium paratungstate	Huntsville, Alabama	Kennametal Inc.
United States	Ammonium paratungstate	Depew, New York	Niagara Refining LLC [Sumitomo Electric Carbide, Inc. (Sumitomo Electric Industries, Ltd.) and New York Tungsten L.L.C. (Buffalo Tungsten Inc.)]
United States	Tungsten carbide	Fallon, Nevada	Kennametal Inc.
Uzbekistan	Ammonium paratungstate	Chirchiq, Tashkent Province	Uzbek Refractory and Heat-Resistant Metals (OJSC "UzKTJM")
Vietnam	Ammonium paratungstate	Dai Tu District, Thai Nguyen Province	Nui Phao H.C. Starck Tungsten Chemicals Manufacturing LLC [Nui Phao Mining Company Ltd. (Masan Group) and H.C. Starck GmbH]
Vietnam	Ammonium paratungstate	Nhon Trach District, Dong Nai Province	Sanher Tungsten Vietnam Co. Ltd.
Vietnam	Ammonium paratungstate	Trang Bang District, TayNinh Province	Tejing (Vietnam) Tungsten Co., Ltd.
Vietnam	Ferrotungsten	Tan Tien Industrial Zone, Vinh Bao District, Hai Phong	ATC Ferrotungsten (60% ATC Alloys Ltd.)
Vietnam	Ferrotungsten	Cailan Industrial Zone, Halong City, Quang Ninh Province	Vietnam Youngsun Tungsten Industry Co. Ltd. (HongKong Wolfram International Investment Co., Ltd.)

Identified global producers of gold bullion

Explanation: Refiners of gold bullion (most are accredited to sell bullion on one or more market exchange). Feed material is indeterminate and may be from mines, intermediate refineries, scrap, or other gold-bearing materials.

Year	Country	Plant type	Location Description	Oblast/ Prefecture/ Province/ State	Operator and ownership
2016	Australia	Refinery: Member of London Bullion Market Association (UK)	Newburn	Western Australia	Western Australian Mint trading as The Perth Mint
2015	Austria	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Vienna	Vienna	Ögussa Österreichische Gold- und Silber-Scheideanstalt GmbH
2016	Belgium	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Antwerp	Antwerp	Tony Goetz NV
2016	Belgium	Refinery: Member of London Bullion Market Association (UK)	Hoboken	Antwerp	Umicore S.A. Business Unit Precious Metals Refining
2016	Brazil	Refinery: Member of London Bullion Market Association (UK)	Nova Lima	Minas Gerais	AngloGold Ashanti Córrego do Sítio Mineração
2015	Brazil	Refinery: Member of BM&F Bovespa	Rio de Janeiro	Rio de Janeiro	House of Currency of Brazil (Casa da Moeda do Brazil)
2015	Brazil	Refinery: Member of BM&F Bovespa	Sao Paulo	Sao Paulo	Marsam Metals
2015	Brazil	Refinery: Member of BM&F Bovespa	Sao Paulo	Sao Paulo	Ubro-Union of Brazilian Refiners Ltda
2016	Brazil	Refinery: Member of London Bullion Market Association (UK)	Guarulhos	São Paulo	Umicore Brasil Ltda.
2013	Burundi	Refinery---Primary source material	Cibitoke	Cibitoke	Etablissements Jean Jbeili
2016	Canada	Refinery: Member of London Bullion Market Association (UK)	Brampton	Ontario	Asahi Refining Canada Ltd.

2016	Canada	Refinery: Member of London Bullion Market Association (UK)	Montréal	Quebec	CCR Refinery - Glencore Canada Corporation
2016	Canada	Refinery: Member of London Bullion Market Association (UK)	Ottawa	Ontario	Royal Canadian Mint
2013	Chile	Refinery---Primary source material	Las Ventanas	V Valparaíso	Corporación Nacional del Cobre (CODELCO), 100%
2011	China	Refinery---Primary source material	Lingbao	Henan	China National Gold Corp.
2016	China	Refinery: Member of London Bullion Market Association (UK)	Huangshi	Huabei	Daye Nonferrous Metals Co., Ltd
2016	China	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Lanzhou	Gansu	Gansu Seemine Material Hi-Tech Co., Ltd.
2016	China	Refinery: Member of London Bullion Market Association (UK)	Chengdu	Sichuan	Great Wall Precious Metals Co. LTD. Of CBPM
2016	China	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Guangzhou	Guangdong	Guangdong Jinding Gold Limited
2016	China	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Zhaoyuan	Shandong	Guoda Safina High-Tech Environmental Refinery Co., Ltd.
2016	China	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Fuyang	Zhejiang	Hangzhou Fuchunjiang Smelting Co., Ltd.
2014	China	Refinery: Member of Shanghai Gold Exchange	Jiyuan	Henan	Henan Yuguang Gold & Lead Co. Ltd.
2016	China	Refinery: Member of London Bullion Market Association (UK)	Fanling	Hong Kong	Heraeus Ltd. Hong Kong
2014	China	Refinery: Member of Shanghai Gold Exchange	Huadian	Jilin	Huadian Gold Co. Ltd.

2013	China	Refinery: Member of Shanghai Gold Exchange	Huaihua	Hunan	Hunan Chenzhou Mining Industry Co Ltd
2016	China	Refinery: Member of London Bullion Market Association (UK)	Hohhot	Inner Mongolia	Inner Mongolia Qiankun Gold and Silver Refinery Share Co., Ltd.
2016	China	Refinery: Member of London Bullion Market Association (UK)	Guixi City	Jiangxi	Jiangxi Copper Co., Ltd.
2013	China	Refinery---Primary source material	Laizhou	Shandong	Laizhou Gold Co.
2016	China	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Lingbao	Henan	Lingbao Jinyuan Tonghui Refinery Co., Ltd.
2016	China	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Luoyang	Henan	Luoyang Zijin Yinhui Gold Refinery Co., Ltd.
2016	China	Refinery: Member of London Bullion Market Association (UK)	Kwai Chung	Hong Kong	Metalor Technologies (Hong Kong) Ltd.
2015	China	Refinery: Member of Shanghai Gold Exchange	Suzhou	Jiangsu	Metalor Technologies (Suzhou) Co Ltd
2016	China	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Penglai	Shandong	Penglai Penggang Gold Industry Co., Ltd.
2013	China	Refinery: Member of Shanghai Gold Exchange	Shandong	Shandong	Shandong Gold Group Co Ltd
2013	China	Refinery: Member of Shanghai Gold Exchange	Yantai	Shandong	Shandong Humon Smelting Co. Ltd.
2013	China	Refinery: Member of Shanghai Gold Exchange	Shandong	Shandong	Shandong Tarzan Bio-Gold Co Ltd
2016	China	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Laizhou	Yantai	Shandong Tiancheng Biological Gold Industrial Co., Ltd.

2013	China	Refinery---Primary source material	Yanggu	Shandong	Shandong Yanggu Xiangguang Co. Ltd.
2016	China	Refinery: Member of London Bullion Market Association (UK)	Zhaoyuan	Shandong	Shandong Zhaojin Gold & Silver Refinery Co., Ltd.
2014	China	Refinery: Member of Shanghai Gold Exchange	Xi`an	Shanzi	Shanxi Gold Group Xian Qin Gold Co. Ltd.
2015	China	Refinery: Member of Shanghai Gold Exchange	Guangdong	Guangdong	Shenzhen Cuilv Gold Co. Ltd.
2015	China	Refinery: Member of Shanghai Gold Exchange	Guangdong	Guangdong	Shenzhen Zhonghenglong Industrial Co. Ltd.
2016	China	Refinery: Member of London Bullion Market Association (UK)	Chengdu	Sichuan	Sichuan Tianze Precious Metals Co., Ltd.
2016	China	Refinery: Member of London Bullion Market Association (UK)	Shandong	Shandong	The Refinery of Shandong Gold Mining Co., Ltd.
2016	China	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Tongling	Anhui	Tongling Nonferrous Metals Group Co., Ltd.
2014	China	Refinery: Member of Shanghai Gold Exchange	Zhaoyuan	Shandong	Yantai Guoda Safeina High-advance Refinery Co. Ltd.
2013	China	Refinery---Primary source material	Yantai	Shandong	Yantai Penghui Copper Industry Co. Ltd.
2013	China	Refinery---Primary source material	Qujing	Yunnan	Yunnan Chihong Zinc and Germanium Co. Ltd.
2015	China	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Kunming	Yunnan	Yunnan Copper Industry Co., Ltd.
2013	China	Refinery---Primary source material	Zhaoyuan	Shandong	Zhaoyuan Gold Co.

2016	China	Refinery: Member of London Bullion Market Association (UK)	Sanmenxia	Henan	Zhongyuan Gold Smelter of Zhongjin Gold Corporation
2014	China	Refinery: Member of Shanghai Gold Exchange	Zhuzho	Hunan	Zhuzhou Smelting Group Co. Ltd.
2016	China	Refinery: Member of London Bullion Market Association (UK)	Shanghang	Fujian	Zijin Mining Group Co., Ltd. Gold Refinery
2012	Czech Republic	Refinery---Scrap material	Pribram	Central Bohemian	Kovohutě Příbram nástupnická, a. s.
2016	Czech Republic	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Vestec	Harare	SAFINA A.S.
2012	Finland	Refinery---Primary source material	Pori	Satakunta	Boliden Harjavalta
2016	France	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Paris	Ile-de-France	SAAMP
2016	Germany	Refinery: Member of London Bullion Market Association (UK)	Pforzheim	Baden-Württemberg	Allgemeine Gold-und Silberscheideanstalt A.G.
2016	Germany	Refinery: Member of London Bullion Market Association (UK)	Hamburg	Hamburg State	Aurubis AG
2016	Germany	Refinery: Member of London Bullion Market Association (UK)	Pforzheim	Baden-Württemberg	C. Hafner GmbH + Co. KG
2016	Germany	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Pforzheim	Baden-Württemberg	DODUCO GmbH
2016	Germany	Refinery: Member of London Bullion Market Association (UK)	Pforzheim	Baden-Württemberg	Heimerle + Meule GmbH
2016	Germany	Refinery: Member of London Bullion Market Association (UK)	Hanau	Hesse	Heraeus Precious Metals GmbH & Co. KG

2016	Germany	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Halsbrücke	Saxony	SAXONIA Edelmetalle GmbH
2016	Germany	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Pforzheim	Baden-Württemberg	WIELAND Edelmetalle GmbH
2016	India	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Bangalore	Karnataka	Bangalore Refinery
2015	India	Refinery: Member of Indian Bullion Market	Ravipuram	Cochin	Chemmanur Gold Refinery (P) Ltd.
2016	India	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Ahmedabad	Gujarat	Gujarat Gold Centre
2014	India	Refinery: Member of Indian Bullion Market	Mumbai	Maharashtra	Infinium Precious Resources Private Ltd.
2014	India	Refinery: Member of Indian Bullion Market	Chandi Chowk	New Delhi	JALAN & Company
2016	India	Refinery: Member of London Bullion Market Association (UK)	Mewat District	Haryana	MMTC-PAMP India PVT Ltd. (joint venture MMTC Ltd. and PAMP SA Switzerland)
2014	India	Refinery: Member of Indian Bullion Market	Mumbai	Maharashtra	Narrondass Manordass Precious Metals Refinery
2014	India	Refinery: Member of Indian Bullion Market	Mumbai	Maharashtra	National India Bullion Refinery
2014	India	Refinery: Member of Indian Bullion Market	Mumbai	Maharashtra	National Refinery PVT LTD
2016	India	Refinery	Haridwar	Uttarakhand	Kundan Care Products Ltd.
2016	India	Refinery	Dhule	Maharashtra	Shirpur Gold Refinery Ltd. (owned by Zee Gold DMCC fo Dubai)

2016	India	Refinery	Ahmedabad	Gujarat	Edelweiss Metals Ltd.
2016	India	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Parwanoo	Himachal Pradesh	Sai Refinery
2016	Indonesia	Refinery: Member of London Bullion Market Association (UK)	Jakarta	Java	PT Aneka Tambang (Persero) Tbk
2012	Iran	Refinery---Primary source material	Rafsanjan	Kerman	National Iranian Copper Industries Co. (NICICO) [Iranian Mines and Mining Industries Development and Renovation Organization (IMIDRO)]
2016	Italy	Refinery: Member of London Bullion Market Association (UK)	Arezzo	Tuscany	Chimet S.p.A.
2016	Italy	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Sesto Fiorentino	Florence	Faggi Enrico S.p.A.
2016	Italy	Refinery: Member of London Bullion Market Association (UK)	Capolona	Tuscany	T.C.A.S.p.A
2016	Japan	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Fuchu	Tokyo	Aida Chemical Industries Co., Ltd.
2016	Japan	Refinery: Member of London Bullion Market Association (UK)	Kobe City	Hyogo	Asahi Pretec Corp.
2016	Japan	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Tamura	Fukushima	Asaka Riken Co., Ltd.
2016	Japan	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Chiyoda	Tokyo	Chugai Mining
2016	Japan	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Kosaka	Akita	Dowa
2016	Japan	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Honjo	Saitama	Eco-System Recycling Co., Ltd.

2016	Japan	Refinery: Member of London Bullion Market Association (UK)	Soka	Saitama	Ishifuku Metal Industry Co., Ltd.
2016	Japan	Refinery: Member of London Bullion Market Association (UK)	Osaka	Kansai	Japan Mint
2016	Japan	Refinery: Member of London Bullion Market Association (UK)	Ōita	Ōita	JX Nippon Mining & Metals Co., Ltd.
2016	Japan	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Sayama	Saitama	Kojima Chemicals Co., Ltd.
2016	Japan	Refinery: Member of London Bullion Market Association (UK)	Iruma	Saitama	Matsuda Sangyo Co., Ltd.
2016	Japan	Refinery: Member of London Bullion Market Association (UK)	Naoshima	Kagawa	Mitsubishi Materials Corporation
2016	Japan	Refinery: Member of London Bullion Market Association (UK)	Takehara	Hiroshima	Mitsui Mining and Smelting Co., Ltd.
2016	Japan	Refinery: Member of London Bullion Market Association (UK)	Noda	Chiba	Nihon Material Co., Ltd.
2016	Japan	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Nara-shi	Nara	Ohura Precious Metal Industry Co., Ltd.
2011	Japan	Refinery: Member of Tokyo Commodity Exchange	Hitachi	Ibaraki	Pan Pacific Copper
2016	Japan	Refinery: Member of London Bullion Market Association (UK)	Saijo	Ehime	Sumitomo Metal Mining Co., Ltd.
2016	Japan	Refinery: Member of London Bullion Market Association (UK)	Hiratsuka City	Kanagawa	Tanaka Kikinzoku Kogyo K.K.
2016	Japan	Refinery: Member of London Bullion Market Association (UK)	Kuki	Saitama	Tokuriki Honten Co., Ltd.

2016	Japan	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Osaka	Kansai	Yamamoto Precious Metal Co., Ltd.
2016	Japan	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Sagamihara	Kanagawa	Yokohama Metal Co., Ltd.
2015	Japan	Refinery---Scrap material	Sagamihara	Kanagawa	Yokohama Metal Co., Ltd.
2015	Kazakhstan	Refinery---Primary source material	Aktyubinsk	Aktobe	Aktyubinsk Copper Company TOO
2016	Kazakhstan	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Balkhash	Karaganda Region	Kazakhmys Smelting LLC
2016	Kazakhstan	Refinery: Member of London Bullion Market Association (UK)	Ust-Kamenogorsk	East Kazakhstan	Kazzinc
2016	Kazakhstan	Refinery: Member of London Bullion Market Association (UK)	Karabalta	Karabalta	Kygyzaltyn JSC
2014	Kazakhstan	Refinery---Primary source material	Astana	Akmola	Tau-Ken Altyn Ltd.
2016	Korea, Republic of	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Namdong	Incheon	Daejin Indus Co., Ltd.
2016	Korea, Republic of	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Gimpo	Gyeonggi	DSC (Do Sung Corporation)
2016	Korea, Republic of	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Danwon	Gyeonggi	Hwasung CJ Co., Ltd.
2016	Korea, Republic of	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Incheon	Seoul	Korea Metal Co., Ltd.
2016	Korea, Republic of	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Gangnam	Seoul	Korea Zinc Co., Ltd.

2016	Korea, Republic of	Refinery: Member of London Bullion Market Association (UK)	Onsan-eup	Ulsan	LS-NIKKO Copper Inc.
2016	Korea, Republic of	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Namdong	Incheon	Samduck Precious Metals
2016	Korea, Republic of	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Changwon	Gyeongsangnam	SAMWON Metals Corp.
2016	Korea, Republic of	Compliant Smelter list	Asan	Chungcheong	Torecom Corp.
2016	Malaysia	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Kawasan Perindustrian Bukit Rambai	Melaka	Modeltech Sdn Bhd
2012	Malaysia	Refinery---Primary source material	Bukit Selinsing Koyan	Pahang	Monument Mining Ltd. of Canada
2012	Malaysia	Refinery---Primary source material	Penjom	Pahang	PT J Resources Asia Pasifik Tbk (J&Partners, L.P., 100%)
2012	Malaysia	Refinery---Primary source material	Raub	Pahang	Raub Australian Gold Mining Sdn. Bhd (Peninsular Gold Ltd., 100%)
2016	Mexico	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Nacozari	Sonora	Caridad
2016	Mexico	Refinery: Member of London Bullion Market Association (UK)	Torreon	Coahuila	Metalúrgica Met-Mex Peñoles S.A. De C.V.
2015	Mexico	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Nacozari	Sonora	Southern Copper Corp. (Grupo México S.A.B. de C.V.)
2016	Netherlands	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Moerdijk	North Brabant	Remondis Argentia B.V.
2016	Netherlands	Refinery: Member of London Bullion Market Association (UK)	Amsterdam	North Holland	Schone Edelmetaal B.V.

2016	New Zealand	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Onehunga	Auckland	Morris and Watson
2013	Oman	Refinery---Primary source material	Sohar	Al Batinah North Governorate	Oman Mining Co. LLC (Government, 100%)
2016	Phillipines	Refinery: Member of London Bullion Market Association (UK)	Quezon City	Manila	Bangko Sentral ng Pilipinas (Central Bank of the Philippines)
2016	Poland	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Lubin	Lower Silesian Voivodeship	KGHM Polska Miedź Spółka Akcyjna
2014	Poland	Refinery---Primary source material	Glogow	Lower Silesian Voivodeship	Kombinat Gorniczo Hutniczy Miedz Polska Miedz S.A. (KGHM) (Government, 31.79%)
2016	Russian Federation	Refinery: Member of London Bullion Market Association (UK)	Verkhnyaya Pyshma	Sverdlovsk	JSC Ekaterinburg Non-Ferrous Metal Processing Plant
2016	Russian Federation	Refinery: Member of London Bullion Market Association (UK)	Verkhnyaya Pyshma	Sverdlovsk	JSC Uralelectromed
2016	Russian Federation	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Chelyabinskaya Oblast	Celjabinsk Celjabinskaja	Kyshtym Copper-Electrolytic Plant ZAO
2016	Russian Federation	Refinery: Member of London Bullion Market Association (UK)	Obrucheve	Moscow Region	Moscow Special Alloys Processing Plant
2016	Russian Federation	Refinery: Member of London Bullion Market Association (UK)	Krasnoyarsk	Krasnoyarsk Krai	OJSC "The Gulidov Krasnoyarsk Non-Ferrous Metals Plant" (OJSC Krastsvetmet)
2016	Russian Federation	Refinery: Member of London Bullion Market Association (UK)	Novosibirsk	Novosibirsk Province	OJSC Novosibirsk Refinery
2016	Russian Federation	Refinery: Member of London Bullion Market Association (UK)	Kasimov	Ryazan	Prioksky Plant of Non-Ferrous Metals
2016	Russian Federation	Refinery: Member of London Bullion Market Association (UK)	Shyolkovo	Moscow Region	SOE Shyolkovsky Factory of Secondary Precious Metals

2016	Saudi Arabia	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Riyadh	Riyadh Province	L'azurde Company For Jewelry
2016	Sinapore	Refinery: Member of London Bullion Market Association (UK)	Tuas	Singapore	Metalor Technologies (Singapore) Pte., Ltd.
2016	South Africa	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Johannesburg	Gauteng	AU Traders and Refiners
2016	South Africa	Refinery: Member of London Bullion Market Association (UK)	Germiston	Gauteng	Rand Refinery (Pty) Ltd.
2016	Spain	Refinery: Member of London Bullion Market Association (UK)	Madrid	Madrid	SEMPSA Joyería Platería S.A.
2016	Sudan	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Khartoum	Khartoum State	Sudan Gold Refinery
2016	Suriname	NMIC	Wit' Santi, Para	Wit' Santi, Para	Kaloti Suriname Mint House (Partnership between Kaloti Precious Metals Group (Dubai, United Arab Emirates), The Government of Suriname and local gold traders)
2016	Sweden	Refinery: Member of London Bullion Market Association (UK)	Skelleftehamn, Ronnskar	Västerbotten	Boliden AB
2016	Switzerland	Refinery: Member of London Bullion Market Association (UK)	Mendrisio	Ticino	Argor-Heraeus S.A.
2016	Switzerland	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Biel-Bienne	Bern	Cendres + Métaux S.A.
2016	Switzerland	Refinery: Member of London Bullion Market Association (UK)	Marin	Neuchâtel	Metalor Technologies S.A.
2016	Switzerland	Refinery: Member of London Bullion Market Association (UK)	Castel San Pietro	Ticino	PAMP S.A.
2016	Switzerland	Refinery: Member of London Bullion Market Association (UK)	La Chaux-de-Fonds, Neuchâtel	La Chaux-de-Fonds, Neuchâtel	PX Précinox S.A.

2016	Switzerland	Refinery: Member of London Bullion Market Association (UK)	Balerna	Ticino	Valcambi S.A.
2016	Taiwan	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Dayuan	Taoyuan	Singway Technology Co., Ltd.
2016	Taiwan	Refinery: Member of London Bullion Market Association (UK)	Tainan City	Taiwan	Solar Applied Materials Technology Corp.
2016	Thailand	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Dokmai	Pravet	Umicore Precious Metals Thailand
2016	Turkey	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Istanbul	Istanbul Province	Atasay Kuyumculuk Sanayi Ve Ticaret A.S.
2016	Turkey	Refinery: Member of London Bullion Market Association (UK)	Kuyumcukent	Istanbul	Istanbul Gold Refinery
2016	Turkey	Refinery: Member of London Bullion Market Association (UK)	Bahçelievler	Istanbul	Nadir Metal Rafineri San. Ve Tic. A.Ş.
2014	United Arab Emirates	Refinery: Member of Dubai Gold Commodities Exchange (UAE)	Jumeriah Lake Towers	Dubai	Al Etihad Gold LLC
2013	United Arab Emirates	Refinery: Member of Dubai Gold Commodities Exchange (UAE)	Al Quoz	Dubai	Al Etihad Gold LLC
2016	United Arab Emirates	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Dubai	Dubai	Al Etihad Gold Refinery DMCC
2011	United Arab Emirates	Refinery---Primary source material	Dubai	Dubai	Al Ghaith Gold (private, 100%)
2011	United Arab Emirates	Refinery---Primary source material	Dubai	Dubai	Al Ghurair Giga Gold DMCC (private, 100%)
2011	United Arab Emirates	Refinery---Primary source material	Sharjah	Sharjah	ARY Aurum Plus (private, 100%)

2016	United Arab Emirates	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Dubai	Dubai	Emirates Gold DMCC
2016	United Arab Emirates	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Dubai	Dubai	Kaloti Precious Metals
2016	United Arab Emirates	Refinery	Dubai	Dubai	Damas Jewellery
2016	United States	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Warwick	Rhode Island	Advanced Chemical Company
2016	United States	Refinery: Member of London Bullion Market Association (UK)	Salt Lake City	Utah	Asahi Refining USA Inc.
2016	United States	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Milwaukee	Wisconsin	AURA-II
2016	United States	Refinery: Member of London Bullion Market Association (UK)	Jackson	Ohio	Elemental Refining, LLC
2016	United States	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Warwick	Rhode Island	Geib Refining Corporation
2015	United States	Refinery---Scrap material	Hempstead	New York	General Refining Corp.(Richard Spera refining Facility)
2016	United States	Refinery: Member of CME Group Market Contract COMEX (New York)	Newark	New Jersey	Heraeus Incorporated
2016	United States	Refinery: Member of London Bullion Market Association (UK)	Magna	Utah	Kennecott Utah Copper LLC
2016	United States	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Buffalo	New York	Materion
2016	United States	Refinery: Member of London Bullion Market Association (UK)	North Attleboro	Massachusetts	Metalor USA Refining Corporation

2016	United States	Refinery: Member of London Bullion Market Association (UK)	Miami	Florida	Republic Metals Corporation
2016	United States	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Williston	North Dakota	Sabin Metal Corp.
2015	United States	Refinery: Member of CME Group Market Contract COMEX (New York)	Scottsville	New York	Sabin Metal Corporation
2016	United States	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Long Island City	New York	So Accurate Group, Inc.
2016	United States	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Alden	New York	United Precious Metal Refining, Inc.
2016	Uzbekistan	Refinery: Member of London Bullion Market Association (UK)	Almalyk	Tashkent Province	Almalyk Mining and Metallurgical Complex (AMMC)
2016	Uzbekistan	Refinery: Member of London Bullion Market Association (UK)	Navoi	Navoi	Navoi Mining and Metallurgical Combinat (NMMC)
2016	Zambia	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Lusaka	Lusaka Province	Universal Precious Metals Refining Zambia
2016	Zimbabwe	Refinery: Conflict Free Sourcing Initiative (Washington, DC)	Msasa	Harare	Fidelity Printers and Refiners Ltd.